

At the start of each year, we, FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition (FRC) Team 2996, Cougars Gone Wired (CGW), challenge ourselves to increase our impact on our community and the world. Lofty goals are put in place, and each year ends with a list of those met and those that need revising. Priorities are re-examined as new ideas spring up. Seniors graduate, but not before imparting a crucial passion to the freshmen, to constantly grow and make ourselves, our team, our community, and our world better. We have over 3,140 volunteer hours, a feature in local news, and a strong student leadership program. Our camaraderie reaches well beyond the 6-week build season and extends everywhere we go. We push ourselves to do more, act more, and be more.

Our impact starts within our team, its roots lying within the positive relationships between our students and mentors. From the start of the year, we develop a family atmosphere, introducing new members to old with our annual Team BBQ. Throughout the first semester, we focus on team-building and, come build season, we eat dinner together as a family each night. As the school year ends our friendships do not; members hold different team activities ranging from movie nights to campfires. Our pride in each other makes our work more impactful.

As a student-led team, we teach students vital leadership and communication skills. The student leadership is comprised of 10 technical and business Vice Presidents, a Chief Executive Officer, a Chief Financial Officer, and a Chief Technical Officer that lead us to success. Each position is decided via a job application process. Applicants must create a cover letter and resumé, then undergo an interview with the team mentors. Throughout the year, student leaders are held accountable for leading their subteam and teaching new members, making them better prepared for their future.

We require each member to be part of both a technical and business subteam to ensure everyone understands all aspects of the team. Having these well-rounded skill-sets creates a greater understanding of how companies function, preparing them for the workforce.

With a 9:5 male to female ratio and a culturally diverse student body, we teach all members to be open-minded professionals. Our students come from 5 different schools and are involved in a variety of extracurricular activities. The diverse strengths and interests of our members teach us to work with personalities different from our own.

Our team strives to maintain a supportive environment, and part of that includes making FRC as affordable as possible. We offer a scholarship honoring a lead mentor Dr. Wood who passed away in the 2014 season. This scholarship is available to students in financial need, helping to cover travel costs.

During the 2016 season, we challenged ourselves to develop an ambitious 5-year plan for a middle school robotics summer camp. In the camp, kids work together to design, program, and build VEX rovers in an FLL-style competition, facing different

daily team-building challenges. Our team members learn how to advertise and organize the camp's curriculum to make it a success, and along the way gain leadership and conflict resolution skills.

On the last day of this year's camp, a parent commented to a team member they were glad they signed their son up for our camp because we provided an amazing one-on-one experience. So much so that all he talked about that week was how excited he was to join our team. This enthusiasm was shared amongst all campers. In fact, all 3 rising 9th graders from the camp joined the family this season.

With a desire to grow youth interest in technology, we started 3 new First LEGO League (FLL) Jr. teams at an elementary school and a local Boys & Girls Club. Every year we make an effort to mentor FLL and FLL Jr. teams. This year we mentored 2 teams from Chipeta Elementary and 3 teams from Howbert Elementary twice a week. Our members serve as role models for the kids and motivate them to stay involved with FIRST. Our annual FLL Jr. Expo has continued to grow since it started in 2013; this year we had 7 teams from 5 different elementary schools in attendance. We took this chance to get both kids and parents excited about a future in FIRST, and inspired many to continue on in Science, Technology, Engineering & Math (STEM). By engaging kids in STEM early on, we provide them with the foundations needed to succeed in later endeavors and make it easier to start FLL teams down the road.

To continue nurturing the younger generation's interest in robotics, one of our team members mentored an FLL team in Black Forest, CO. Every year for the past 7 years we have also been key volunteers at the Southern Colorado FLL Qualifier, teaching our students to be better leaders and work with other branches of FIRST.

This year, a new opportunity arose to help an all girls school in Mérida, Yucatán, Mexico. Our team members purchased and sent a LEGO Mindstorms EV3 kit to their school with Spanish manuals and guides to help promote their technology program. We plan to further this relationship through development of an FLL team and find additional ways to expand our outreach beyond borders.

Every year we also make an effort to raise funds to build a full-scale FRC field so that we can share it with teams around us. We host the Colorado Pre-Ship Scrimmage before taking it to the Colorado Regional to be used as the practice field. Scrimmage gives 20 FRC teams the opportunity to test their robots and make final edits. We set up the field and spend hours running the event, ensuring all attending teams have everything they need.

We have also forged a positive relationship with our home school, Coronado, making it easier to spread FIRST's message. Our varsity recognized robotics team holds demonstrations at many school events such as the District 11 Career Fair and the 8th Grade Open House. Since our inception, the annual Coronado Homecoming Parade has

been a creative outlet for the team. We build a float and cheer while marching through our community.

In addition to that, our team takes part in personal service projects. Our Head Coach underwent heart surgery in 2010, and every year since then we have volunteered with the American Heart Association Heart Walk. We have rekindled our relationship with the Southern Colorado Care & Share Food Bank, which was instrumental in assisting many of our students who were affected by the 2012 Waldo Canyon Fire.

We have also maintained excellent relationships with our sponsors, establishing new partnerships as well as maintaining pre-existing connections. After years of helping one of our oldest sponsors, B.P.O.E. (Benevolent and Protective Order of Elks) Lodge #309, with all of their charity balls, they graciously supported us in hosting a fundraiser dinner. Hard work from our finance subteam found sponsors for meat and chips from local businesses. The dinner was incredibly successful and feedback was extremely positive. We plan to continue utilizing our connection with the Elk's Lodge for years to come.

Since our second year, the National Association of Women in Construction (NAWIC) Chapter 356's January meeting has been held at our school. We kick off their meetings with a presentation on our team and FIRST, followed by a tour of our workshops. This relationship is invaluable since female role models in STEM are rare. This year, we worked with NAWIC to involve their members as mentors in our team, a relationship we wish to embellish in the future.

This year, we took part in "Dean's Homework" by requesting meetings with various local legislators to pass House Bill 5168 and Senate Bill 2890 to mint a commemorative coin in honor of Christa McAuliffe. Senator Cory Gardner's Regional Director, Mr. Brandon Gould, responded, and set up a meeting at our school. We showed him what FRC teams could accomplish and our dedication to spreading STEM education throughout the community. Impressed by the students' professionalism and hard work, Mr. Gould left in favor of the bill.

Our dedication to our community has resulted in new opportunities created for the team. Over the last 6 years our team has volunteered at the What If? Festival, appearing each year on the local news showing support of the event and spreading the mission of FIRST. Annual appearances at the Cool Science Festival, Cheyenne Mountain's "Boo at the Zoo", and Pikes Peak Library District Summer Reading Parties have made us well-known throughout our community. With 3,140 hours of team participation in 40 events, Colorado Springs families are now more than familiar with our "muppet robot" driving all through town.

Due to the impact in our community, the Denver Tech Conference personally invited our team to give a presentation on FIRST. This offered the team an excellent

chance to share our accomplishments with the STEM business community, and further our relationships with new companies.

For the past 6 years, we have hosted a “Sea Perch” event at the Coronado pool, where small groups assemble an underwater robot to navigate an obstacle course. This provides us with a positive relationship with a local STEM organization, the Challenger Learning Center, who organizes the competition.

Our team, FIRST Robotics Competition Team 2996 Cougars Gone Wired, has grown over the years into a model FIRST team by reaching the goals we have set, creating and setting new ones, and continuously pushing ourselves to reach new heights. This year, we accomplished more than ever, establishing new summer camps, new FLL Jr. teams, and starting an international program in Mexico, all while increasing our community outreach. All of these accomplishments are fueled by our ceaseless passion to work together as a family, grow as a team, and prove that robotics isn't just a season, it's a way of life.